

CALIFORNIA ENERGY COMMISSION

# RENEWABLE ENERGY PROGRAM

# QUARTERLY REPORT TO THE LEGISLATURE

April 2002 through June 2002

# **COMMITTEE REPORT**

JULY 2002 P500-00-007v10



Gray Davis, Governor

# CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET SACRAMENTO, CA 95814-5512



July 15, 2002

Members of the Senate Energy, Utilities and Communications Committee
Members of the Senate Budget and Fiscal Review Committee
Members of the Senate Appropriations Committee
Members of the Assembly Utilities and Commerce Committee
Members of the Assembly Budget Committee
Members of the Assembly Appropriations Committee
California State Capitol Building
Sacramento, California 95814

# RE: California Energy Commission's *Quarterly Report to the Legislature* Concerning the Renewable Energy Program

### Honorable Members:

The Public Utilities Code (PUC), Article 5, Section 445(g) requires the California Energy Commission to submit quarterly reports on the Renewable Energy Program. Enclosed is the seventeenth *Quarterly Report to the Legislature* for the Program, covering the period April 1 through June 30, 2002. As reflected in this report, the Energy Commission continues to make excellent progress in implementing the Program.

Should you have any questions or comments concerning these reports, please contact Tim Schmelzer, Assistant Director of the Office of Governmental Affairs, at 654-4942 or by e-mail at [tschmelz@energy.state.ca.us].

Respectfully submitted,

# ROBERT PERNELL

Commissioner and Presiding Member Environmental and Energy Infrastructure and Licensing Committee

### Enclosure

cc: California Legislative Analyst's Office

# California Energy Commission's Quarterly Report Regarding the Renewable Energy Program

(April 1 - June 30, 2002)

The California Energy Commission is pleased to submit its *Quarterly Report to the Legislature* on the Renewable Energy Program, covering the period April 1 through June 30, 2002. The Energy Commission is required to report to the Legislature quarterly on fiscal and functional aspects of the program. This report describes the Energy Commission's implementation activities, including information regarding awards submitted to the State Controller for payment, the cumulative commitment of claims by account, the relative demand for funds by account, a forecast of future awards, and related matters.

# **Background**

Assembly Bill 1890<sup>3</sup> (AB 1890) required California's three major investor-owned utilities to collect \$540 million from their ratepayers over a four-year period (1998-2002) to help support renewable electricity-generation technologies and develop a renewable market. As mandated by AB 1890, the Energy Commission submitted its *Policy Report on AB* 1890 Renewables Funding (Policy Report) to the Legislature in March 1997, with recommendations for allocating and distributing these funds. Senate Bill 90<sup>4</sup> (SB 90) subsequently established the Renewable Resource Trust Fund, placed the \$540 million into the fund, and directed the Energy Commission to distribute the fund through four distinct accounts, which is consistent with the *Policy Report*. These accounts and the total funds initially allocated to each are as follows:

- Existing Renewable Resources Account (\$243 million)
- New Renewable Resources Account (\$162 million)
- Emerging Renewable Resources Account (\$54 million)
- Customer-Side Renewable Resources Purchases Account:
  - Customer Credit Subaccount (\$75.6 million)
  - Consumer Education Subaccount (\$5.4 million)

In January 1998, consistent with SB 90, the Energy Commission adopted overall funding guidelines, eligibility requirements, yearly allocations, and account-specific guidelines to assist participants in applying for funding from the various accounts within the Program. These guidelines provide for fund reallocations among accounts, which are discussed in this report.

In September 2000, Assembly Bill 995<sup>5</sup> and Senate Bill 1194<sup>6</sup> codified the Reliable Electric Service Investments Act (RESIA) and extended the collection of funds from 2002 to 2012. As directed by the RESIA, beginning January 2002

<sup>&</sup>lt;sup>1</sup> Public Utilities Code (PUC), Article 5, Section 445(g).

<sup>&</sup>lt;sup>2</sup> As a procedural matter, the Energy Commission submits awards directly to the State Controller for payment, rather than through the Treasurer.

<sup>&</sup>lt;sup>3</sup> Chapter 854, Statutes 1996

<sup>&</sup>lt;sup>4</sup> Chapter 905, Statutes 1997

<sup>&</sup>lt;sup>5</sup> Chapter 1051, Statutes 2000

<sup>&</sup>lt;sup>6</sup> Chapter 1050, Statutes 2000

an amount starting at \$135 million per year is collected from the same ratepayers noted above. The RESIA requires the Energy Commission to provide recommendations on how to allocate funds over the first five years of that period. The Energy Commission submitted such recommendations to the Legislature in June 2001 in a report titled, *Investing in Renewable Electricity Generation in California* (*Investment Plan*). The Legislature is considering these recommendations during its 2002 session; as of this writing, the Legislature has yet to approve the *Investment Plan*. The RESIA also requires the Energy Commission to prepare a second investment plan by March 2006, proposing the allocation of funds from 2007 to 2012.

To the extent possible, we intend to transition seamlessly from implementing the initial Renewable Energy Program to the planned extended program under the RESIA. A smooth transition will minimize or avert interruptions in funding disbursements and provide the renewable energy industry and its customers with a measure of certainty in an uncertain electricity market. However, until the Energy Commission is authorized to implement the RESIA, some initial program funds are being held in abeyance, while other funds continue to be disbursed from the Renewable Resource Trust Fund until the funds are expended, in accordance with each account's *Guidebook*. According to the *Investment Plan*, any funds remaining in the Renewable Resource Trust Fund at the end of the initial program would be rolled into the extended program under the RESIA.

Immediately following passage of the RESIA, we plan to conduct public workshops to discuss the procedures and guidelines necessary for the extended program's implementation. Considerations would likely include lessons learned during the initial four years of the program, stakeholder input, and program staff recommendations.

This report documents the fund expenditures for the initial Renewable Energy Program implementation, focusing on the program activities in the second quarter of year 2002.

# **Renewable Energy Program Implementation**

The mechanisms to distribute funds and implement activities vary by account. Table I highlights the Energy Commission's implementation activities for the second quarter of 2002, and the expected funding and implementation activities for the third quarter of 2002. The remainder of the report discusses each account's activities during this quarter in more detail and summarizes our progress in implementing the Renewable Energy Program.

# **Renewable Resources Trust Fund Expenditures**

Through June 30, 2002, the Renewable Resource Trust Fund had collected a total of \$555.0 million<sup>8</sup> for all of the accounts for the initial program implementation. As of the second quarter of 2002, the Energy Commission had awarded a total of \$270.9 million, reflecting account payments (disbursements). Eligible applicants had reserved \$222.2 million, reflecting fund reservations (encumbrances) from the New Account, the Emerging Account, and the Consumer

<sup>&</sup>lt;sup>7</sup> June 2001, California Energy Commission Publication Number P500-00-022.

<sup>&</sup>lt;sup>8</sup> Includes \$15 million transferred from the General Fund to the Emerging Account pursuant to AB 29X and \$13,477 in voluntary contributions, but does not include \$196,000 collected from Bear Valley Electric Company ratepayers.

Education Subaccount. Table II shows a financial summary of the Renewable Resource Trust Fund as of the second quarter of 2002, reflecting cumulative funding and expenditures since the beginning of the Program, including those that occurred during this reporting period.

# Table I - Renewable Energy Program Second Ouarter 2002 Program Implementation

Second Quarter 2002 Program Implementation							
Account, Program-Implementation, and Funding Activities: April - June 2002	Expected Funding and Implementation Activities: July - September 2002						
<ul> <li>A total of 378 facilities are registered as renewable suppliers; 274 facilities are eligible for funding.</li> <li>Payments totaling \$12,161 were made to Tier 2 projects for an adjustment to generation prior to December 31, 2001.</li> <li>Rollover funds total \$36.3 million for Tiers 1, 2, and 3 excluding the funds authorized for reallocation to the New Account for the third auction.</li> </ul>	<ul> <li>If the legislation authorizing the RESIA is made retroactive to January 2002, no further Existing Account payments will be made from the initial program funds.</li> <li>The delay in implementing the RESIA renders it unlikely that the Existing Account will make any payments during the third quarter of 2002. We anticipate that the first payments under the RESIA will be made in October 2002, at the earliest.</li> <li>Construction of new projects will continue, as will payments to on-line facilities.</li> <li>Funding Award Agreements with winning bidders in the second and third auctions will continue to be finalized.</li> <li>Four funding awards from the June 1998 auction, which total \$18 million, may be cancelled due to inability to establish contact with the project developers.</li> <li>A final decision is expected on the Petition for Reconsideration of award cancellations.</li> <li>Projects not on-line by 12/31/01 will continue to submit petitions to extend funding awards.</li> </ul>						
Emerging Account							
<ul> <li>Funds encumbered for Buydown Program reservation requests currently total \$39.4 million.</li> <li>To date, payments for installed systems total \$41.9 million, with \$10.3 million in payments this quarter.</li> <li>This quarter 814 new reservation requests were received.</li> <li>Since funds totaling \$8 million were approved for rebates to publicly-owned utility customers, 24 applications have been submitted.</li> </ul>	<ul> <li>The Commission will continue to update lists of eligible PV modules and inverters.</li> <li>At the current rate of activity, Buydown rebate funds will be nearly depleted by the end of the third quarter.</li> </ul>						
	Side Account						
Customer Credit Subaccount							
<ul> <li>Although only five marketers remain active in the market, 29 registered providers have registered a total of 48 products containing renewable energy.</li> <li>One wholesaler re-registered, increasing the total of registered wholesalers to five.</li> <li>To date, over \$59.4 million has been paid to providers.</li> <li>About \$0.6 million was paid to providers this quarter.</li> <li>Payments this quarter completed payment for activity occurring in 2001.</li> </ul>	<ul> <li>Market activity will probably remain fairly steady as most providers have already exited the market, and no new customers are allowed to participate in the direct access market.</li> <li>Payments will not be made for market activity in 2002 until the RESIA legislation is passed. Consequently, no payments are expected in the third quarter of 2002 unless funds are returned for the large customer category.</li> </ul>						

# Table I (continued) - Renewable Energy Program Second Quarter 2002 Program Implementation

Account, Program-Implementation, and Funding
Activities:
April - June 2002
Expected Funding and Implementation
Activities:
July - September 2002

# **Customer Side Account**

### **Consumer Education Subaccount**

- Payments totaling \$262,980 were made to grant recipients for project activities this quarter.
- Steering Committee meetings for the Hearst Castle Visitor Center Renewable Energy Project continued during this quarter.
- ICF Consulting introduced a draft Renewable Energy Alliance Resource Kit for review.
- ICF Consulting continued to implement the public awareness campaign. Payments to ICF for this quarter totaled \$339,020.
- Energy Commission staff participated in Earth Day events and fairs in San Diego, Los Angeles, Berkeley, and Santa Barbara.
- The American Wind Energy Association included copies of the Small Wind Electric Systems: A Consumer Guide in their mailing to targeted California communities.
- News and print media covered the inauguration of Bren Hall on the UCSB campus.
- Staff exhibited at the Pacific Coast Builders Conference in San Francisco and introduced a new brochure about building-integrated photovoltaics.
- Energy Commission staff completed three "streaming" video segments on photovoltaics.
- A third Program Opportunity Notice (PON) for approximately \$500,000 in grant funding was released during this quarter. Applications were due July 5, 2002.

- Work will continue on the five grant projects from the second grant solicitation.
- ICF Consulting will continue public relations and public awareness campaign activities, introducing a new graphic look for outreach materials.
- A new brochure for the Emerging Buydown rebate program and renewable energy fact sheets will be finalized.
- The Renewable Energy Alliance Resource Kit will be finalized and distributed to Alliance members.
- The staff will conduct workshops and exhibit at Solfest in August in Hopland, CA.
- Applications received in response to the third PON for grant funding will be scored, and winning projects will be considered for approval at an Energy Commission Business Meeting.
- Three "streaming" video segments on photovoltaics will appear on the [consumerenergycenter.org] website. Future video segments will focus on wind energy.

As Table II reflects, in the second quarter of 2002 the State Controller made payments from the Emerging Account to recipients of Emerging Renewables Buydown Program rebates, from the New Account to projects that are now on-line and generating electricity, and from the Consumer Education Subaccount to grant-award recipients and contractors for renewable energy consumer education activities. Payments were made from the Existing Account for electricity produced and from the Customer Credit Subaccount to providers of renewable energy sold through December 2001.

The Energy Commission encumbered funds from the Emerging Account for systems eligible for the Buydown Program rebates, the Consumer Education Subaccount for grant and contract project activities, and from the New Account for 78 projects with funding award agreements from the first, second, and third auctions. Funding for these projects will eventually total up to \$231.4 million; funds from the New Account will continue to be reserved, as funding becomes available.

The Renewable Energy Program design has a built-in, two-month processing period for payments to eligible energy producers and developers in several accounts. Payments have been suspended from the Existing Account and the Customer Credit Subaccount for activity occurring in year 2002 pending passage of legislation implementing the RESIA, at which time we expect to make retroactive payments.

Table II - Renewable Resource Trust Fund Cumulative Funding and Expenditures as of the Quarter Ending June 30, 2002 (\$ Millions)

	Existing	New	Emerging	Customer-Side Account		Program Total
Account	Account	Account	Customer Credit	Consumer Education		
Collected Funds	243.000	162.000	69.000 <sup>9</sup>	75.600	5.400	555.014 <sup>10</sup>
Total Disbursements	(151.744)	(15.557)	(41.876)	(58.861)	(2.825)	(270.863)
Second Quarter '02 Disbursements	(0.012)	(1.945)	(10.306)	(0.064)	(0.602)	(12.929)
Intrafund Transfers	0.000	0.000	0.000	0.000	0.000	0.000
Intrafund Reallocations	(55.000) <sup>11,12</sup>	33.800 <sup>13</sup>	31.200 <sup>14</sup>	(10.000) <sup>15</sup>	0.000	0.000
Balance	36.256	180.243	58.324	6.739	2.575	284.138
Encumbrances	(36.256) <sup>16</sup>	(180.243) <sup>17</sup>	(39.414) <sup>18</sup>	0.000	(2.575) <sup>19</sup>	(258.488)
Unencumbered Funds	0.00	0.00	18.910	6.739	0.00	25.650

The participating utilities continue to make deposits into the Renewable Resource Trust Fund. As of December 2001, \$465 million had been collected from the utilities for the initial program funds, with an additional \$67.3 collected by March 2002, leaving a \$7.7 million shortfall. This amount was paid during the current quarter, concluding the collection of the \$540 million in funds for the initial program, as required by SB 90. Adding the funds transferred from the State's General Fund as authorized by SB 29X, and voluntary contributions, brings the total funds collected as of June 30, 2002, to \$555 million.

<sup>&</sup>lt;sup>9</sup> Includes \$15 million transferred from the General Fund to the Emerging Account pursuant to AB 29X.

<sup>&</sup>lt;sup>10</sup> Includes \$13,477 in voluntary contributions, but does not include the \$196,000 collected from Bear Valley Electric Company ratepayers for the initial program implementation.

To date, the Energy Commission has reallocated \$40 million from the Existing Account to the New Account for the second auction, and authorized the reallocation of up to \$40 million for the third auction.

<sup>&</sup>lt;sup>12</sup> AB 29X ordered the reallocation of \$15 million from the Renewable Resource Trust Fund (Existing Account) to the Emerging Account.

<sup>&</sup>lt;sup>13</sup> The Energy Commission redirected \$6.2 million from the New Account to the Emerging Account, reducing a previous \$40 reallocation to the New Account to \$33.8 million.

<sup>&</sup>lt;sup>14</sup> See Footnotes 12, 13, and 15.

<sup>&</sup>lt;sup>15</sup> The Energy Commission has reallocated \$10 million from the Customer Credit Subaccount to the Emerging Account.

<sup>&</sup>lt;sup>16</sup> Encumbered for potential reallocation to the New Account as winning projects from the third auction come on-line and become eligible for funding.

<sup>&</sup>lt;sup>17</sup> The Energy Commission conditionally allocated \$162 million at its June 1998 auction, \$40 million at its December 2000 auction, and up to \$40 million at its August 2001 auction. As funds become available, they are encumbered for projects.

<sup>&</sup>lt;sup>18</sup> Reservation requests granted (but not yet paid) since the March 20, 1998 start-up of the Buydown Program.

<sup>&</sup>lt;sup>19</sup> Encumbered for grant projects and contract activities.

# **Existing Account**

Given that the Legislature has not yet approved the RESIA legislation authorizing the extension of the Renewable Energy Program, the Energy Commission suspended payments to all Existing Account facilities as of December 31, 2001. As a result, only \$12,161 was disbursed during the second quarter of 2002 for adjustments to Existing Account facilities for generation produced prior to December 31, 2001. Given the current delays in approving the RESIA, it is highly unlikely that any payments will be made from the Existing Account during the third quarter of 2002. We currently estimate that the first payments from the Existing Account under the RESIA could be made in October 2002, at the earliest.

Disbursements from the Existing Account to date total \$151.7 million. The Existing Account's rollover amount currently stands at \$36.3 million, <sup>20</sup> which includes the reallocation of \$55 million to the New Account and Emerging Account (\$40 million and \$15 million respectively). The rollover consists of the funds remaining in the Existing Account after payments have been made to facilities in a given monthly payment cycle. Any funds that are not paid in one month are rolled over and added to the following month's allocation, becoming available for that month's payments. The Energy Commission has approved up to the full amount of the Existing Account's rollover funds remaining from the initial program implementation for reallocation to a separate area of the Renewable Energy Program. After determining the amount of funds needed for reallocation, any remaining funds shall be available for rollover into the RESIA funds.

To date, the Energy Commission has reallocated or authorized the reallocation of up to \$80 million in Existing Account rollover funds to the New Account to fund the winning projects of its second and third auctions. In the first quarter of 2000, \$40 million was reallocated to the New Account for a second auction, and in the second quarter of 2001, up to a maximum of \$40 million was authorized for reallocation for a third New Account auction. The actual transfer of funds for the third auction will not occur until the winning projects are on-line and eligible to receive payments.

To satisfy the requirements of Senate Bill 29X, an additional \$15 million in Existing Account rollover funds was reallocated to the Emerging Account to provide increased funding for Emerging Renewables Buydown rebates. The Energy Commission reallocated an additional \$6.2 million from the Existing Account to the Emerging Account. These funds were originally reallocated to the New Account for the second auction; because it was not needed for that purpose, that amount was redirected to the Emerging Account. At a later date, the Energy Commission will determine the actual amount of funding needed to fully fund winning projects from the third New Account auction. This figure may not be known for some time because auction winners could possibly drop out, qualify for additional incentives, or have their funding awards either reduced or canceled.

## **New Account**

Of the 78 projects that won funding awards in the three New Account auctions, 35 are on-line and producing electricity. These projects currently contribute 201 megawatts (MW) of new renewable generating capacity to California's electricity supply.

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<sup>&</sup>lt;sup>20</sup> This figure does not account for the funds (up to \$40 million) that the Energy Commission has authorized for reallocation to the New Account for the purpose of funding the third auction. At least \$3.7 million proposed for that reallocation will not be needed, however, and that amount will remain in the Existing Account.

To date, nine landfill gas facilities totaling 27.5 MW of capacity, two geothermal projects totaling 59 MW, two wind projects totaling 18.6 MW, one 7.5 MW biomass project, and one 9.9 MW small hydro project have received \$15.5 million in payments from the New Account. These projects represent approximately 1,200 gigawatt-hours (GWh) of new renewable generation. The remaining 20 facilities, totaling 78.55 MW of capacity, are delivering power to the grid but have not yet received incentive payments for reasons such as not submitting invoices, adequate proof of generation, or adequate proof of being on-line.

The New Account program guidelines were revised to establish a petition process for project developers requesting extension of their funding awards under an amendment to Public Utilities Code section 383.5(c)(2)(B). The amendment allows New Account projects to come on-line after

December 31, 2001, and still receive five years of incentive payments from the program, as long as the Energy Commission makes a formal finding that the delay in on-line date was a result of "circumstances beyond the developer's control."

Fifteen project developers with funding awards from the first auction and 11 project developers from the second auction experienced delays and were unable to begin generating electricity by the December 31, 2001, deadline. Eleven project developers have submitted petitions asking for award extensions, citing reasons such as permitting delays, the lack of available power purchase contracts in California's uncertain electricity market, and the inability to get project financing without such contracts. Developers of the remaining 15 projects are expected to submit petitions during the third quarter of 2002.

Under the program guidelines, the policy committee overseeing the Renewable Energy Program has 30 days from receipt of a petition to either issue a decision or schedule a public hearing to consider the petition. The full Energy Commission must approve the policy committee's decision on the petition at a regularly scheduled Business Meeting.

Three wind projects from the first auction owned by Enron Wind Development Corporation and one wind project owned by Painted Hills Wind Developers (an Enron affiliate) are facing cancellation of their funding awards because the project developers:

- (1) Did not submit information required by the program guidelines regarding progress toward bringing the projects online, and
- (2) Did not maintain appropriate contact with the Energy Commission regarding the projects.

The funding awards for these four wind projects (113 MW) total \$17.8 million. Letters were sent to the project developers in March 2002 informing them of the Energy Commission's intention to cancel their funding awards. The project developers jointly submitted a Petition for Reconsideration to the Energy Commission. The petition was deemed incomplete, however, and a letter was sent to the developers informing them of the revisions necessary to make the petition complete. The Energy Commission will make a decision on the Petition for Reconsideration in the third quarter of 2002. Any funds freed by award cancellations are returned to the Renewable Resource Trust Fund for reallocation.

# **Emerging Account**

The Emerging Renewables Buydown Program has received 6,409 reservation requests since it began in March 1998, including 814 new requests received during the second quarter of 2002. Payments totaling \$10.3 million were made to participants in the Buydown Program during the second quarter of 2002, bringing total disbursements from the Emerging Account to \$41.9 million. A total of \$88.2 million has been encumbered and paid since the program began.

The Buydown rebates continue to be appealing primarily as a result of California residents' and businesses' interest in securing a reliable and cost-predictable electricity source, with environmental benefits also being a strong motivator, according to surveys and discussions with consumers.

Another stimulus for consumers considering a solar or wind system is a new state tax credit. Signed by Governor Davis in September 2001, Senate Bill 17X2<sup>21</sup> was designed to encourage the installation of solar and wind systems up to 200 kilowatts (kW) by providing a 15 percent tax credit for tax years 2001 and 2002 and a 7.5 percent credit for tax years 2003 and 2004. The Energy Commission worked with the Franchise Tax Board to develop worksheets for self-certifying systems in applying for the tax credit.

Although account activity remains lower than last year at this time, this is predictable considering the state's relatively stable energy picture so far this year. Nevertheless, the rate of reservation requests is still quite high at 250 to 300 per month. Approximately \$20 million in rebate funds has been reserved in the first six months of this year alone, leaving only about \$10 million available for the remainder of the initial program implementation. This is significant given that currently funding has only been available for systems that are 10 kW or smaller. Assuming that account activity continues at this brisk and steady pace, these funds are likely to be depleted near the end of the next quarter.

As noted above, funding for rebates for medium and large systems was fully encumbered during the fourth quarter of 2001. Since last fall, there has been a "funding gap" for emerging systems sized between 10 to 30 kW. The Buydown Program has funding for projects up to and including 10 kW, while the California Public Utilities Commission's Self Generation Program, administered by the investor-owned utilities, offers funding for eligible projects between 30 kW and 1.5 MW. Unless funding is replenished to this size category, the funding gap will probably remain until the RESIA legislation is approved and implemented.

Currently, \$39.41 million is encumbered for projects with reservation requests. The total amount of encumbered funds does not include about 244 reservation requests in "received" status, which are still in various stages of the review process and have not yet received funding approval.

Since December 2001,<sup>22</sup> \$8 million in rebates has been available to customers of local publicly-owned electric utilities for small systems (10 kilowatts or less). Only 24 reservation requests have been submitted for these funds, resulting in rebates totaling \$230,000. Several factors could explain this low rate of activity: customers of publicly-owned utilities generally do not have the same economic incentive to offset their electricity costs; some publicly-owned utilities offer similar rebates; system retailers could have enough business without the need to advertise rebates in publicly owned utility areas; publicly-owned utilities may not be promoting the rebates to their customers.

<sup>&</sup>lt;sup>21</sup> Revenue and Taxation code Sections 17053.84 and 23684.

<sup>&</sup>lt;sup>22</sup> AB 29X authorized that \$8 million be made available for rebates to customers of local publicly-owned utilities.

With the assistance of technical support contractors, the staff continues to update lists of eligible photovoltaic (PV) modules and inverters.

### **Customer Credit Subaccount**

At the close of the third quarter in 2001, the California Public Utilities Commission (CPUC) implemented Senate Bill 1X, which directed the CPUC to suspend retail customers' right to purchase energy through the direct access market. This suspension, which became effective on September 20, 2001, prohibits new customers from entering into direct access contracts; customers that were already making direct access purchases, however, may continue to do so. The CPUC considered making the suspension retroactive to July 1, 2001, but voted not to do so on March 21, 2002.

For eligibility, the Customer Credit Subaccount requires participants to purchase renewable electricity through a direct access contract. While direct access remains suspended for new program participants, it continues to impact the implementation of the Customer Credit Subaccount in 2002.

A reflection of market activity is depicted through the number of providers registered and actively serving customers. The number of active providers has remained steady at five for the first and second quarters of 2002. This quarter, however, the load served by these providers decreased slightly from the previous quarter.

Since providers are not required to change their registration status with the Energy Commission when they exit the market, the total number of registered renewable providers continues to remain fixed from last quarter at 29 providers with 48 products, although only five providers are active in the market. The number of registered wholesalers increased to five with the re-registration of one wholesaler this quarter.

The customer credit level remained at 1.0 cent per kWh for load served during the six-month period from July through December 2001. We do not expect to re-set the credit level until the Energy Commission is authorized to implement the RESIA legislation.

To date, the State Controller has paid \$59.4 million to registered renewable providers for customer credits. Payments in the second quarter of 2002 totaled \$0.6 million, less than half of the amount paid during the previous quarter. Currently, the Customer Credit Subaccount is not making payments on sales activity occurring in year 2002, pending passage of legislation to implement the RESIA. Payments could be made retroactively for eligible renewable electricity sales made in 2002 after implementing legislation is approved. Given that payments are currently suspended from the Customer Credit Subaccount, and that data are now complete for 2001 activity and payments have been made, expenditures from the Customer Credit Subaccount are not likely next quarter. Payments would resume, however, if funds for large customers are returned, at which time payments will be redistributed to large customers with outstanding claims, or if legislation to implement the RESIA is passed.

### **Consumer Education Subaccount**

During the first quarter of 2002, activities were completed from the first grant solicitation, held in 2000. Payments totaling \$262,980 were made this quarter for grant project activities for which invoices were received. Recent activities under the second grant solicitation, offered in 2001, include the following:

- The Arcata Co-op installed a 2 kW PV system on its store roof and held a dedication ceremony on Earth Day
  in April. An informational sign and brochures explaining how consumers can install their own systems are
  available at the store. The Ocean Beach Co-op is experiencing delays in the store's construction, and thus the
  PV system installation and dedication will not occur until later this year, after the grant project term ends in
  April.
- The 30-minute video, "This Renewable House," was made available to public television stations in California for airing in time for Earth Day in April. Six PBS stations aired the program, and another three have committed to air it later this year. San Francisco's PBS station, KQED, reported that the program received the same rating as its model, "This Old House," with about 38,000 viewers. Copies of the video were distributed to California Building Industries Association (CBIA), California Builder's Exchange, EPRI, and the Institute for Solar Living. The Wherehouse Music (76 stores) and Bradley Video (9 stores) have committed to distribute the video, having received 150 videos for release in July. Fifty copies were also distributed to Global Possibilities, whose non-profit efforts focus on colleges and university architecture schools.

A paper about the project, co-authored by the grant recipient and the Energy Commission, was presented at the Solar Forum during the Northern California Chapter of American Solar Energy Society (ASES) conference in Reno in June. The project received substantial press coverage including IREC's website and newsletter, Natural Home Magazine, Lohas Journal, Light Energy Systems' newsletter, and the Press Democrat. Numerous articles about "This Renewable House" were presented to several magazines including Natural Home, Home Power, Solar Today, Better Homes and Gardens, Northern California SUN, and various building industry publications.

- The Energy Commission received a second draft Teacher's Guide in early June for review.
- Two solar schoolhouse workshops were held in Oakland in April. Oakland Tech High School students
  developed "solar music box" kits, and students at St. Elizabeth's School built a small solar pond and installed
  three solar modules.
- The second edition of the "Stimulating the Implementation of Renewable Energy Technologies" (SPIRE) Technical Assistance packet was updated in March. Designed to help California local governments, schools, and special districts implement renewable energy, the packet summarizes rebate incentives, financing opportunities, procurement options, and technical assistance that are available to California's public sector.

The SPIRE project was an item in the Local Government Commission's (LGC) annual membership conference, "Community Livability in 2002," in Yosemite in March, where the packet was included in participant packages. The project received interest from elected officials from several municipalities including the Inland Empire Utilities Agency, City of San Luis Obispo, City of Saint Helena, City of Oakland, City of Berkeley, and City of Petaluma. As a result of Sacramento's PV Forums in February, LGC provided assistance to several cities this quarter, including: City of Lompoc, Port of Oakland, Placer County, City of Pleasanton, and City of San José.

• The American Wind Energy Association (AWEA) mailed a flyer on "California Wind Power for Energy Independence" and a fact sheet on installing small wind energy systems to 65,000 households in May in the counties of Solano, Kern, San Bernardino, Los Angeles, Alameda, Sonoma, Santa Cruz, and San Luis Obispo.

Success stories of residential-scale wind turbine installations were developed and posted on AWEA's website at <www.awea.org/smallwind/success\_stories.html>.

The Energy Commission released its third program opportunity notice (PON) in May 2002 for grant funding to enhance projects that aim to advance the growth of the renewable energy market in California. Approximately \$500,000 is available for projects in the following categories: schools, new construction, non-profit or public entities, advertising, and publicity or events. Applications were due July 5, 2002, with the highest-scoring projects planned for Energy Commission approval in the third quarter of 2002.

The contractor developing and implementing the Renewable Energy Public Awareness Campaign, ICF Consulting, continues to develop and update campaign materials. A new graphic look for the Renewable Energy Program has been designed, and new fact sheets for small wind, solar (photovoltaics), biomass, geothermal, and fuel cells and renewable energy will be finalized next quarter. ICF finalized a new brochure for the Emerging Renewable Buydown Program, along with a fact sheet on the state tax credit for installing a solar electric system. Payments to ICF Consulting for which invoices were received this quarter total approximately \$339,000.

ICF Consulting designed a new booth display, introducing the Renewable Energy Program's campaign slogan—Harness the Power All Around Us—that was used for the first time during Earth Day. The booth will be displayed at other trade shows, meetings, and special events throughout the campaign. ICF Consulting and the Energy Commission participated in four Earth Day events throughout California in April—Berkeley (April 20), San Diego (April 21), Los Angeles

(April 20-21), and Santa Barbara (April 21). Commission staff distributed information and answered questions about renewable energy and the Emerging Renewables Buydown Program at these events. Materials were also provided for distribution at additional Earth Day venues throughout the state. The Energy Commission also exhibited at the Total Building Expo in San Francisco on April 3-4, distributing program information and speaking with over 100 commercial building owners, property managers, and engineers.

The April 19th grand opening of Bren Hall on the campus of the University of California at Santa Barbara received publicity and media coverage facilitated by ICF Consulting. Bren Hall houses the Bren School of Environmental Sciences and Management and has been recognized by the US Green Building Council as one of the best examples of sustainable design. A roof-integrated 47 kW photovoltaic system has been installed, which will generate seven to ten percent of the building's load. In addition to prompting media coverage surrounding this event, ICF Consulting developed a media list, press kit, and a video news release with interviews of the UCSB Chancellor and the Energy Commission staff. The video was sent over satellite on April 19 and May 1 for news producers and television stations throughout California, and it was picked up and aired by 15 local stations and numerous others outside the state.

ICF Consulting provided media support for the Solar Home Tour in San Diego on May 18. Local print and broadcast media worked with ICF Consulting to distribute news releases, and ICF encouraged coverage prior to the tour. The media placement results included four newspaper stories, coverage by two television stations, and three Internet sites.

The Energy Commission and ICF Consulting are working with representatives of the Hearst Castle® Visitor Center to develop a showcase project highlighting energy efficiency and renewable energy technologies. The goal of the project is to create a public showcase of the installation and use of renewable energy systems at the Visitor Center and to raise awareness about renewable energy. Two Steering Committee meetings were conducted during this quarter. A list of

potential sponsors, grant sources and foundations were compiled and the Hearst Castle® staff is conducting further research into potential renewable energy systems to be installed at the site.

The Renewable Energy Alliance, a partnership of organizations connected to California's renewable energy market, is being developed by ICF Consulting and the Energy Commission. To help Alliance members promote renewable energy, a Resource Kit will be available that will include copies of Energy Commission fact sheets and ordering information, a copy of the Solar Living video, public service advertisements, a ready-to-use press release and sample story announcing the members' participation in the Alliance, all of which will also be provided on CD when the kit is finalized. Copies of the Resource Kit will be available to potential Alliance members, with updates as new information and promotional opportunities arise.

On June 11 and 12, the Energy Commission participated in a series of short videos on solar photovoltaics shot in the Los Angeles/Palm Springs area. Each of the three to eight minute videos will be placed on the <consumerenergycenter.org> website. Video topics include:

- 1) "About Photovoltaics/An Overview of PV Technology"
- 2) "Photovoltaic Installation Details"
- 3) "Overview of the Buydown Program"

A highlight of the videos included a demonstration workshop presented by Bill Brooks, showcasing PV installation details for builders and contractors. Various photovoltaic applications were profiled, including residential and commercial, with interviews of the PV owners. These videos are being produced in cooperation with the Energy Commission's Energy Efficiency Division and iShow, which has provided all the consumer/business educational videos for the Consumer Energy Center.

On June 26-28, 2002, the Home Building's Premier Tradeshow and Conference on the West Coast, PCBC (Pacific Coast Builder's Conference) attracted over 24, 000 building industry professionals (architects, designers, contractors as well as residential homeowners) to the Moscone Center in San Francisco. The Commission's renewable energy exhibit was popular with show attendees, who requested information about renewable energy systems and the Emerging Buydown rebate. The exhibit illustrated renewable energy sources at work: the power of the sun and wind with an operating solar windmill, solar powered radios, and a solar powered music box. "This Renewable House," a video funded through a Consumer Education grant, was the focus of a staff presentation, and was aired all three-conference days. The Energy Commission introduced a popular new flyer on building-integrated photovoltaics. Pens composed of recycled materials and colorful magnets provided the toll free phone number and website to guide visitors to the Energy Commission to learn more. Demographic information and requests for additional information were gathered from the booth's attendees. The Energy Commission will compile the data and follow-up with information packets to those requesting more information.

With the assistance of the Energy Commission's technical support subcontractor, Endecon Engineering, the staff is developing a simple *PV Maintenance and Troubleshooting Guide* for consumers who install a PV system and need to understand how to care for and receive the highest performance from their systems. After being reviewed by PV industry experts, the staff received a draft of the *Guide* this quarter, and plans to finalize it next quarter for distribution to interested contractors, builders, and homeowners.

# **Summary**

In summary, the Energy Commission has made excellent progress in implementing the Renewable Energy Program over the last four years. We anticipate that the Legislature will soon approve the RESIA, and we will proceed with our transition plan for implementing the Renewable Energy Program over the next five years.